

REMARKS:

In the outstanding Office Action, the Examiner rejected claims 1-10 and 17-24. Claims 1, 2, 17, 19 and 21-24 are amended herein, and new claim 25 is added. No new matter is presented. Claims 11-16 remain cancelled. Support for the amendments can be found at least on page 9, lines 24–28 and page 10, lines 10-21.

Thus, claims 1-10 and 17-25 are pending and under consideration. The rejections are traversed below.

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 1-10 and 17-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application 2002/0002502 (Maes) and U.S. Patent Publication No. 2003/0061211 (Shultz).

Maes alleges to facilitate a search for a product by presenting products that are similar when a user selects one or more products already displayed to the user (see, paragraphs 21 and 59). As illustrated in Figs. 3 and 4, a user is initially provided with various types of cars and is only provided with cars having traits of cars desired by the user after the user scans through the initially provided results and selects therefrom (see also, paragraphs 113-116). That is, Maes requires the user to review and make a selection from the initial graphical depictions of the products that have resulted from the search in order to be provided with other products that are similar to the selected product.

Moreover, Maes calculates the similarity between an article specified in a key or query by a user and search results, and arranges the search results in a “decreasing order of similarity” to the article specified by the user (see, paragraphs 27 and 62).

Shultz is directed to geographic information system (GIS) based search engine that subsequently sorts matching geographic information (see, paragraphs 18). The sorting of results in Shultz is based on sorting criterion such as geographic location, time and price, where if the criterion is decreasing order of price, articles having prices close to one another are displayed close to each other (see, paragraphs 18, 60 and 61). That is, Shultz does not teach or suggest that article image arrangement is determined based on the “similarity of features of article pictures obtained as search results”, as taught by the claimed invention (see discussion of claims below).

In a web page described in an ordinary HTML as in Maes and Shultz, requests for obtaining pictures are made in the order described in the HTML (the order from the top page). As such, in the case where pictures of articles are arranged in an increasing order of price in a web page, the pictures of the articles are transmitted in an increasing order of article price.

In contrast to Maes and Shultz, according to the claimed invention, pictures are transmitted in accordance with the data sending rank, irrespective of the arrangement of pictures.

Maes and Shultz do not teach or suggest sending picture data in accordance with the data sending rank set separately or independent from the arrangement order of article pictures, as taught by the claimed invention (see discussion of claims below).

The claimed invention eliminates the need for a user to review irrelevant results by displaying pictures of articles having similar features in close proximity to one another as initial search results. The article picture arrangement data is generated based on the similarity of features of pictures obtained as search results, and the article pictures are arranged so that a group of articles of search results similar to each other are placed close to each other (i.e., those which are not similar to each other are placed farther from each other).

Independent claim 1, by way of example, recites, "generating article picture arrangement data of all search resultant article pictures in which the more similar features of the search resultant article pictures are to each other, the more closely the search resultant article pictures are disposed on a two-dimensional plane." Claim 1 further recites, "sending the search resultant article pictures in accordance with the data sending rank, said article picture arrangement data being independent of the data sending rank" and "displaying each of the search resultant article picture at each arrangement position in accordance with the article picture arrangement data on a screen as initial search results in a receiving order." As such, "an article picture with a higher data sending rank" is displayed "earlier at the arrangement position."

Similarly, claims 17 and 19 recite, "article picture arrangement data of all search resultant article pictures in which the more similar features of the search resultant article pictures are to each other, the more closely the search resultant article pictures are disposed on a two-dimensional plane" that is used to display the search resultant article picture "as initial search results." Claims 17 and 19 also recite that the article picture arrangement data is "independent of the data sending rank."

Claim 21 recites, “assigning a data sending rank relating at least one feature of an article picture to at least one feature of other pictures of articles” and “generating article picture arrangement data in which search resultant article pictures of articles with features similar to each other are disposed at close positions, said data sending rank being independent of the article picture arrangement data.” Claim 21 further recites, “successively displaying each search resultant article picture as initial search results responsive to an article search request from a user based on the article picture arrangement data upon transmission in accordance with the data sending rank.”

Claim 22 recites, “receiving an article search request from a user and ranking article images responsive to the article search request based on similarity of features of the article images” and “transmitting search resultant article images in an order independent of said ranking.” Claim 22 further recites, “displaying the search resultant article images as initial article search results... so that search resultant article images corresponding to articles with similar features are positioned to be in adjacent positions among the displayed search resultant article images.”

Claim 23 also recites, “providing the sorted images of the search resultant articles to the user as an initial search result”, where the articles having “similar features are displayed as a unified group based on said sorting and transmitted based on a data sending rank independent of said sorting.”

Claim 24 recites, “assigning display positions to article images based on similarity of articles shown in said article images and inputs of the providers” and “displaying the article images as an initial result of a search request”, where the display positions are “independent of a sending order of the article images.”

Neither Maes nor Shultz teach or suggest “article picture arrangement data” determined based on the similarity of features of a plurality of article pictures obtained as search results, and “sending rank” or “order” that is “independent” of the picture arrangement data, as recited in claims 1, 17, 19 and 21-24.

Further, Maes and Shultz do not teach or suggest the above-discussed features of the independent claims including displaying similar search resultant article pictures as an “initial search result” were the more similar “features of the search resultant article pictures” are disposed closely, as recited in claims 1, 17, 19 and 21-24.

It is submitted that the independent claims are patentable over Maes and Shultz.

For at least the above-mentioned reasons, claims depending from the independent claims are patentably distinguishable over Maes and Shultz. The dependent claims are also independently patentable. For example, as recited in claim 5, "a service provider previously analyzes items considered by a service user based on a past search history and a past purchase history of the service user and determines the data sending rank in accordance with the analyzed items" (see also, claim 9).

Maes and Shultz, alone or in combination, do not teach or suggest features claims 5 and 9 including sending rank where "a service provider previously analyzes items considered by a service user based on a past search history and a past purchase history of the service user", as recited in claims 5 and 9.

Therefore, withdrawal of the rejection is respectfully requested.

NEW CLAIM:

New claim 25 has been added to recite, "sorting pictures of articles... prior to providing a result in response to the search request" and "transmitting said pictures according to a sending rank regardless of an order of said sorting", where pictures of articles having similar features are "positioned adjacent to each other."

Maes and Shultz, alone or in combination, do not teach or suggest the above-discussed features including, "sorting pictures prior to providing a result" and "transmitting said pictures according to a sending rank regardless of an order of said sorting", where pictures of articles having similar features are "positioned adjacent to each other", as recited in claim 25.

It is submitted that new claim 25 is patentably distinguishable over Maes and Shultz.

CONCLUSION:

Accordingly, claims 1, 2, 17, 19 and 21-24 are amended herein, and new claim 25 is added. Thus, claims 1-10 and 17-25 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

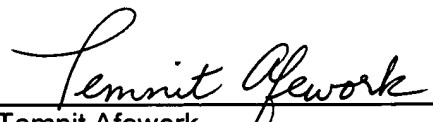
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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